

**INITIAL ENVIRONMENTAL EXAMINATION  
AND  
REQUEST FOR CATEGORICAL EXCLUSION**

**PROGRAM/ACTIVITY DATA:**

**Program/Activity Number:** 690-017  
**Country/Region:** Regional Center for Southern Africa (RCSA), Gaborone, Botswana  
**Program/Activity Title:** Strategic Objective 17: Integrated River Basin Management

**Funding Begin:** FY04    **Funding End:** FY10    **LOP Amount:** \$ 17,800,000  
**Sub-Activity Amount:** NA

**IEE Prepared By:** Jeremy N. Burgess & Karen Menczer, Independent Consultants, and Ginger Waddell, USAID/RCSA  
**Current Date:** 17 June 2004

**IEE Amendment (Y/N):** No    If "yes" filename & date of original IEE \_\_\_\_\_ ; \_\_/\_\_/\_\_

**ENVIRONMENTAL ACTION RECOMMENDED:** (Place X where applicable)

Categorical Exclusion:   X                        Negative Determination:   X    
Positive Determination: \_\_\_\_\_                      Deferral: \_\_\_\_\_

**ADDITIONAL ELEMENTS:** (Place X where applicable)

CONDITIONS   X      PVO/NGO: \_\_\_\_\_

**SUMMARY OF FINDINGS:**

The proposed Activity includes three components and nine interventions, all designed to achieve integrated, transboundary management of the Okavango River basin through support and capacity building for Okavango River Basin Water Commission (OKACOM), the development of system-wide data systems and models to support more effective decision-making, and the engagement of local communities in water management activities by connecting them via ICT to OKACOM and by funding pilot projects in all three riparian states: Angola, Namibia, and Botswana.

**A Categorical Exclusion** is recommended for all activities under the USAID/RCSA SO 17 per 22 CFR 216.2 ( c )(1)(i), that will have no foreseeable effect on the biophysical environment. Specifically, a **Categorical Exclusion** is recommended for the majority of activities under Components 1, 2 and 3 of the Integrated River Basin Management Program because these activities involve only education, technical assistance, training, seminars, workshops and information transfer. These activities fit one or more of the following subparagraphs: 22 CFR216.2(c)(2)(i) [education, technical assistance, training]; 22 CFR216.2(c)(2)(ii) [controlled experimentation]; 22 CFR216.2(c)(2)(iii) [analyses, studies, workshops and meetings]; 22 CFR216.2(c)(2)(v) [document and information transfer]; and, 22 CFR 216.2(c)(2)(xiv) [programs to develop capability of recipient countries and organizations in development planning].

Only one intervention, the development of pilot projects under Component Three, is likely to cause negative environmental impacts. This is the pilot projects intervention, which would directly impact the environment through the development of small-scale irrigation systems or other infrastructure. Therefore, ***a negative determination with conditions is recommended*** for this intervention. Any negative impacts can be mitigated, though, through careful activity planning.

For Component 3, the recommended **conditions/mitigating measures** are:



## INITIAL ENVIRONMENTAL EXAMINATION

### PROGRAM/ACTIVITY DATA:

Program/Activity Number: 690-017  
Country/Region: Regional Center for Southern Africa  
Program/Activity Title: S.O. 17: Integrated River Basin Management (IRBM)

## 1.0 BACKGROUND AND PROJECT DESCRIPTION

### 1.1 Purpose and Scope of IEE

The purpose of this IEE is to identify the reasonably foreseeable environmental effects of activities that will be conducted under the Integrated River Basin Management (IRBM) Activity. The IRBM Activity will be RCSA's main vehicle for achieving the overall objectives of SO 17: to change river basins from being a source of conflict to a gateway for engagement among riparian states by addressing competing demands, and to meet society's long-term needs for water while maintaining essential ecological services and economic benefits. Illustrative interventions under consideration to accomplish these objectives are described in greater detail below.

This IEE

- describes the illustrative interventions and applicable categorical exclusions,
- identifies activity components that may have environmental consequences,
- recommends mitigation and additional environmental review for certain interventions, and
- based on the extent of the intervention and impacts, recommends the applicable level of environmental review (ERR versus IEE versus EA) and level of approval (Mission Environmental Officer/Regional Environmental Advisor (MEO/REO) versus USAID/Washington Bureau Environmental Officer) that will be needed.

None of the interventions currently identified are expected to have significant effects on the environment (as defined in 216.2 (d)(1)), and therefore, it is unlikely that an EA will be required.

### 1.2 Background

The Okavango River basin is relatively undeveloped. The delta in the lower basin, formed by the flows of the river into the Kalahari Desert, is the largest of its kind in the world. It has been designated as a RAMSAR wetland site and is a well known tourist destination. While civil war in Angola prevented upstream development, and Namibia's planned hydropower and water transport schemes, under consideration since the 1960's, have been delayed, future development in the basin is inevitable. Water allocation shares have not been set, but a Basin Commission has been established. The development challenge associated with managing this transboundary natural resource is to:

- determine the best approach for long-term management of the river system to meet the needs of all of its users,
- create and sustain institutions and organizations that can manage the river in the best interests of all, providing a major input to important economic sectors in all three countries,
- ensure that management decisions are based on the best data and analysis possible, and
- ensure that the interests of all stakeholders are represented in the course of the decision-making process.

### **1.3 Problem Statement**

Water scarcity in Southern Africa is a growing issue with increasing population growth and associated growing demands for domestic, farm, fishing and industrial consumption, and for hydro-electric power, resulting in increasing stress on finite and often limited water resources. The problem is further exacerbated by the common (and perhaps increasing) occurrence of protracted droughts and extreme geographical variations in rainfall, soil moisture, river inflows, and floods.

To address water scarcity and insecurity, countries are turning to inter-basin transfers of water. Disagreements on how best to use water resources in certain river basins are increasing. Water availability and security are challenged by lifestyles of rural populations that increase stresses on the natural environment without due regard for its protection. This results in unsustainable land use practices in areas of hydrological significance that increase water stress and limit livelihood options. Therefore, the improved management of transboundary water resources will be crucial to ensuring sustainable improvements in livelihoods within a context of protection of the environment.

### **1.4 Proposed Solution**

Resolving trade-offs in uses of water for irrigation, hydropower, industrial, municipal and environmental uses of international watercourses cannot be achieved solely by working at the national level. Equitable and efficient management of the region's valuable water resources will be essential for preservation of natural resources and the environment, ensuring food security, alleviating poverty, and promoting economic development. Given the uneven distribution of the supply and demand of water resources, balancing competing demands for water must be a high regional priority.

The protection and management of international watercourses are best accomplished within a regional framework because regional cooperation

- affords greater protection of resources,
- allows for greater economic efficiency,
- shortens the learning curve with regard to best management practices, and
- increases opportunities for continued international dialogue, and reduces the potential for political conflict over water.

An integrated river basin management approach to dealing with the issues of shared watercourses allows for a comprehensive planning and implementation perspective on the resource and de-emphasizes the importance of international borders.

The proposed IRBM Activity will support achievement of the SO 17 intermediate results (IRs):

- Institutional capacity strengthened (IR 17.1)
- Improved community management of critical hydrological areas (IR 17.2)

### **1.5 Activity Components**

The objectives of the new activity are to strengthen the institutional, legal, regulatory and technical capabilities and community involvement in managing this valuable regional resource. In designing this activity, RCSA consulted with a broad range of stakeholders, including Commissioners of OKACOM, NGOs active in community level projects in the basin, technical experts, and community leaders.

The IRBM Activity will focus on the Okavango River Basin during an initial three-year implementation period with the option of an additional three-year period working either in the Okavango or another selected river basin. There are three activity components:

- Strengthening OKACOM and member states,
- Policy, legal, planning and management,
- Community participation and enterprise.

### **Component 1: Strengthening OKACOM and member states**

This component of the IRBM Activity will focus on strengthening the capacity of OKACOM. Interventions include

- operational and communications support to OKACOM,
- technical capacity building for OKACOM and Water Ministries, and
- communications system within the OKACOM framework.

### **Component 2: Policy, legal, planning and management**

This component of the IRBM Activity will strengthen the capacity of OKACOM, riparian states, communities, NGOs and other stakeholders to adopt and use appropriate analytical tools for developing integrated, multi-sectoral water management plans. Interventions include

- development of analytic tools and shared data systems;
- hydrological flow monitoring;
- improved policy, legal, and management decision-making.

### **Component 3: Community participation and enterprise**

This component will utilize community-based best management approaches and techniques that are relevant to watershed management. These include the devolution of management responsibility to community institutions and promotion of participatory governance practices to foster civic engagement. Interventions include

- creation of basin level resource centers and
- small scale pilot projects to reduce/prevent/mitigate adverse impacts on the basin.

## **2.0 COUNTRY AND ENVIRONMENTAL INFORMATION**

### **2.1 Locations Affected**

The Okavango River extends for more than 1,600 kilometers from the interior highlands of Angola, across the Caprivi of Namibia to its inland terminus in the extensive wetlands of the Okavango Delta of Botswana. The basin area, considering only the regularly flowing areas upstream of the base of the Okavango Delta, is approximately 320,000 km<sup>2</sup> (FAO, 1997) forming the fourth largest river basin in southern Africa.

Approximately 52% of the basin area lies in Angola, 33% in Namibia and 15% in Botswana. The full basin area, considering the vast largely dry areas of the Makgadikgadi Pans system in Botswana and Zimbabwe, is more than 700,000 km<sup>2</sup> (Turton, 2001).

Nearly 75% of the river flow is derived from the upper catchment in Angola, with negligible runoff inflow in Namibia and the remainder occurring as rainfall on the extensive wetlands in the delta area of Botswana. The mean annual runoff at Mohembo, just upstream of the Okavango Delta, is approximately 10,000 MCM. On the order of 98% of this inflow to the Okavango Delta is lost through evapotranspiration and recharge to aquifers.

At present there is only minimal development of the water resources of the river system or land area of the river basin. In Angola there is some small-scale irrigation development (primarily gravity-fed) in the very

uppermost portions of the basin concentrated near Cuito and Huambo. Largely as a result of the long-term civil unrest that only recently ended, most of the central and southern basin in Angola is sparsely inhabited. The provincial capital is located along the Cubango River in the middle basin. The main prospect for increased demand for water resources for potable supply and small-scale irrigation is expected to arise from the resettlement of refugees in province. There is also an increasing potential for degradation of the watershed land area related to increasing agriculture and harvesting of fuel wood.

In Namibia there is perhaps the greatest likelihood for large-scale abstraction of water from the river both for potable supply and as part of development of irrigated agriculture. At present it is estimated that Namibia is using 5 MCM per year, of which 41% is used for potable supply and 56% is used for agriculture (Turton, 2001). Originally proposed in 1996 (and subsequently put on hold), there is a strong possibility that Namibia will source water for demand centers (primarily Windhoek) in central Namibia from the Okavango River in the near future. The planned off-take, which will feed into an eastern national water carrier, is 17 MCM per year. Additionally, there are plans for development of more extensive irrigation systems as part of Namibia's Green Scheme, which envisages on the order of 8,000 hectares of irrigated land (to replace current imports) in the Okavango Basin of Namibia (MAWRD, 2003).

Botswana has only very limited development of water resources in the basin, with the major use associated with water supply to the town of Maun, located at the base of the delta. Groundwater forms the bulk of the supply with annual consumption planned to increase from the present 1.2 MCM to more than 7 MCM in the next 15 years. However, the water of the Okavango River has the greatest value in Botswana not for potable supply or irrigation, but for tourism centered on the wetlands and abundant wildlife of the Okavango Delta. As such, Botswana's main concern regarding the Okavango River is to maintain flows sufficient for protecting the ecosystems of the delta. Although there is no significant off-take of water from the river system at present, there has been a steady decrease in flooded area and outflow at the base of the delta through the 1990's, culminating in the lowest outflow in the recorded period in 1995. It is not clear at present what is driving the observed reductions in outflow in the lower delta, but it has highlighted the potential impacts of changes in the delta hydrologic regime on the communities and tourism industry in Botswana

## 2.2 National Environmental Policies and Procedures

The National and other applicable environmental policies derive from the laws and policies of each of the three countries, Angola, Namibia and Botswana, and the joint policies of the SADC community. A second over-arching policy derives from OKACOM.

### National Policies and Regulations

| Country | Environmental Legislation &/or Policy   | Level of Implementation   |
|---------|---|---|
| Angola  | <ul style="list-style-type: none"> <li>• Constitutional law (Article 12, No. 2 and Article 24. Nos. 1, 2, and 3) commits the State to correctly use of natural resources, guaranteeing sustainable development for all.</li> <li>• Law No. 5/98 of June 19 1998 defines the concepts and basic principles of environmental protection, preservation and conservation, promotion of improved quality of life and a rational use of natural resources.</li> <li>• Apart from this law (5/98), the GoA has committed itself to develop a National Program for Environmental Management, including all necessary structures and specialized organs, and creating the legislation that enables their enactment.</li> </ul> | GoA has limited capacity to guide, monitor and evaluate development activities through environmental review procedures. GoA has recently committed itself to developing environmental regulations to control development activities, but the more detailed aspects of this initiative |

|          |   |  |
|----------|---|--|
|          | <ul style="list-style-type: none"> <li>• Since provision of portable water represents a major concern, the Angolan Ministry of Health committed itself to developing environmental regulations to control and monitor water and sanitary infrastructure incl. latrines</li> </ul>           | not likely to be available soon.   |
| Botswana | Legislation on environment within certain Government Ministries and Departments. Over-arching responsibility for environmental policy lies with the National Conservation Strategy Agency (NCSA); proposed environmental regulations have not yet been passed by the Government of Botswana | NCSA insists on, and reviews EIAs for all development projects, specific ministries also require EIA according to their own format(s). |
| Namibia  | The Directorate of Environmental Affairs (DEA) is one of four directorates under the Ministry of Environment and Tourism  | Legislation only in draft form, but policies in place and enforced   |

### 2.3 Joint SADC protocol on shared watercourse systems and implications for the Okavango River Basin

To address rapidly growing problems of water scarcity, the Southern African Development Community's Protocol on Shared Watercourse Systems was signed in 1995 and amended in 2000. Through the Protocol, signatories agree to use shared watercourses in an equitable manner and to maintain optimal uses of shared waters. Elements of the Protocol include provisions for member states to

- issue discharge permits for emissions to shared waters that originate inside their countries and ensure they do no harm to downstream states;
- notify other states of emergency situations originating within their borders that can have adverse impacts on downstream states; and
- maintain and protect systems to prevent pollution or environmental degradation, and to ensure that watercourse systems are used for peaceful purposes.

The Protocol calls for establishment of a system of river basin management institutions to facilitate regional cooperation and collaboration as well as basin-level and national-level implementation. Responsibilities of basin management institutions are to: develop an implementation monitoring policy for shared watercourse systems, formulate strategies for development, and monitor execution of integrated water resources development. They are to

- provide recommendations to riparian countries to enable them to harmonize national laws and policies;
- assist member states in the collection and analysis of data, review national development plans, design and conduct studies for environmentally sound development and management, and stimulate public awareness;
- recommend regulation of flow and drainage;
- promote flood and drought mitigation;
- recommend management measures;
- monitor water usage;
- promote pollution prevention;
- establish a list of substances that should be controlled;
- promote environmental impact assessment;
- promote assessment of effects of navigation on environmental quality; and
- promote hydro-meteorological programs in consultation with SADC.

## 2.4 OKACOM

OKACOM is the most mature river basin management institution in Southern Africa and it is already developing an integrated management plan through a process involving national governments, community groups, the private sector, and environmental non-governmental organizations (NGOs). OKACOM does, however, experience problems relating to a lack of communication follow-up on meetings and other issues that could be dealt with by an efficient Secretariat. It also has no enforcement powers and all decisions entered into between the three countries, are done so “in good faith”.

## 3.0 EVALUATION OF PROJECT/PROGRAM ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

### 3.1 Stage of Environmental Review

This IEE has been conducted during the IRBM Activity planning and design phase. At this stage, it is not possible to accurately identify the entire range of possible activities and environmental effects that could result from this activity.

Although many interventions can be categorically excluded (216.2(c)(2)) at this stage, certain interventions may have environmental effects. A **Negative Determination with Conditions** is recommended for these interventions, and additional environmental review may be required once locations and specific activities are better defined during the work planning process.

### 3.2 Potential Environmental Consequences

All the interventions in SO 17 relate to human activities that provide logistical support, technical, legal, and policy assistance, with the exception of the Pilot Projects Intervention. The majority of interventions will therefore create no negative impacts on the environment, or on the socio-economic conditions of people inhabiting the project activity area(s).

The Pilot Project interventions will directly impact the environment if they involve the development of physical infrastructure such as irrigation systems. These potential environmental consequences should be factored into the proposal and work-planning phases of the projects undertaken to implement the design.

At the overall SO level, there could also be impacts resulting from increased migration to areas that show promise for improved agricultural production and income generation potential. Additionally, new production methods may be adopted over a wide area. This may increase the land area under agricultural production, placing increased pressure on natural resources, particularly woodlands, forests, water, and other sensitive habitats and marginal lands. Possible environmental impacts arising would be land degradation, soil loss, and ground and surface water over-use and water quality degradation.

#### 3.2.1 Irrigation Water Productivity

Water productivity in small scale irrigation is the use of methods of irrigation such that only the optimal amount of water is used. This includes using methods that limit wastage of water, application of only optimal amounts of water, and irrigation at appropriate intervals for given crops. In the basin the main importance of emphasizing water productivity is reducing water consumption by irrigation activities, limiting erosion, and minimizing leaching and return flow to the river. These issues are especially important given the sandy soils that characterize much of the basin which are more permeable and have less retention.

#### 3.2.2 Improved Agricultural Methods



Throughout the basin, increasing agriculture on the typically sandy soils which characterize much of the basin requires the use of fertilizer to maintain soil productivity. Fertilizer use is already prevalent in the upper basin in Angola and would be required as part of Namibia's "Green Scheme" irrigation program. However, increased nutrient runoff to the Okavango River system could have disastrous impacts to the ecology of the river and especially the Okavango Delta. Technical assistance to existing irrigation projects would focus on assessing the available fertilizer types and application methods to minimize impacts on river water quality. Other potential activities would include such land management intervention as tree planting, terracing, erosion control, etc. The assistance would concentrate on identifying methods that limit impacts while also improving productivity and reducing input costs to farmers so that basin management shows appreciable local benefits.

### **3.3 Mitigation by Design**

RCSA will require an assessment of possible sub-activities in prospective pilot areas, to make sure that it makes sense economically and that there are appropriate niche activities.

Two models are applied: 1) CBNRM, working in the framework that USAID/Namibia has created and 2) mitigation activities in areas where there are people already planting fields. This is most likely to be related to the level of fertilizer use, the prevention of soil erosion, and the appropriate choice and use of small-scale irrigation – if they are irrigating or planning to irrigate already. That is, RCSA would be following, not leading, the practices being invested in.

If grants will be given for pilot projects, it would be around ten grants a year.

The intent of the activity in Angola is to prevent contamination and silting of the river basin from the resettlement that is going on right now. If people aren't going into a particular area, then we wouldn't go in either. But it's the right time to be working on this, before damage is done to the Okavango River.

Some attention may be given to contamination in the Okavango delta. But this will be defined further in the assessment.

## **4.0 RECOMMENDED THRESHOLD DECISIONS & MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)**

### **4.1 Recommended Threshold Decisions and Conditions**

The recommended threshold decisions for each activity component are summarized below:

**Component One** interventions will be accomplished by providing technical assistance and training (216.2(c)(2)(i)); supporting analyses, studies, and workshops (216(2)(c)(2)(iii); document and information transfer (216.2(c)(2)(v)); and supporting studies, projects of programs intended to develop the capability of recipient countries to engage in development planning (216.2(c)(2)(xiv)). These activities mainly involve strengthening regional and national institutions. None of the interventions will directly affect the environment, and therefore, categorical exclusions are recommended for all Component One interventions.

**Component Two** interventions will also be accomplished by providing technical assistance and training (216.2(c)(2)(i)); supporting analyses, studies, and workshops (216(2)(c)(2)(iii); document and information transfer (216.2(c)(2)(v)); and supporting studies, projects of programs intended to develop the capability of recipient countries to engage in development planning (216.2(c)(2)(xiv)). Categorical exclusions are therefore recommended for all interventions.

**Component Three** interventions include creation of basin-level resource centers and small-scale pilot studies in all three riparian states. Creation of the resource centers will be accomplished by providing technical assistance and training (216.2(c)(2)(i)); supporting analyses, studies, and workshops (216.2(c)(2)(iii)); document and information transfer (216.2(c)(2)(v)); and supporting studies, projects or programs intended to develop the capability of recipient countries to engage in development planning (216.2(c)(2)(xiv)).

Activities under Component Three that will involve small-scale pilot projects to reduce prevent and/or mitigate adverse impacts on the basin, have not yet been sufficiently defined. It is expected that these might include small-scale irrigation, erosion control, hillside stabilization and/or other micro-level watershed management interventions. A **negative determination with conditions** is recommended for these activities.

The recommended **conditions/mitigating measures** are:

1) In connection with the pilot projects interventions, sustainable development and management plans will be drawn up, and an associated ERR should be completed for each community-level intervention. These conditions should be addressed during the pilot selection process, which may take place during development of the work plan or sometime in the first year of the project. ERRs should be submitted to the REA, who will determine the need for additional environmental review. A blank two-page ERR form, with instructions, is attached as Annex 1 to this document.

2) For potential small grants, an environmental screening process shall be used prior to activity implementation, as appropriate. The ERR form is recommended and it is attached to this document as Annex 1.

3) For small scale interventions relating to watershed management, the application of “best practices” for environmentally optimal design and execution are advised. A recommended source for such best practices is the USAID/AFR Africa Bureau EGSSAA (<http://www.encapafrika.org/SmallScaleGuidelines.htm>). Pertinent chapters include: Agriculture and Irrigation, Community-based Natural Resources Management, and Forestry.

## 4.2 Mitigation, Monitoring and Evaluation

Mitigation measures (conditions above) will be used during the work planning process to incorporate site-specific and activity-specific mitigation measures into implementation plans.

For activities that fall under Component 3, “Community Participation and Enterprise” and that relate directly to the implementation of “small scale pilot projects to reduce/prevent/mitigate adverse impacts on the basin”, an environmental screening process such as the use of the ERR is advised.

As described in that form, screening categories include the following<sup>1</sup>:

**Very low risk (Category 1)** activities: would normally qualify for a categorical exclusion under Reg. 216;

**Medium risk (Category 2)** activities: would normally qualify for a negative determination under Reg. 216;

**High risk (Category 3)** activities: have a clear potential for undesirable environmental impacts and typically under Reg. 216 require an Environmental Assessment; and

**Very high risk (Category 4)** activities that either USAID cannot fund, or for which specific findings must be made in an Environmental Assessment prior to funding.

The MEO shall be responsible for clearing the implementing partner’s category determination. The MEO shall be responsible, first, for clearing the implementing partner’s category determination. Further, the MEO must approve all Category 2 Environmental Reviews individually or in groups. The MEO will review and pass on to the REO and BEO any Category 3 reviews and, as he/she determines the need, Category 2 documentation.

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<sup>1</sup> “[Annex G: Umbrella IEEs and Subgrant Environmental Screening](#),” as well as in the Africa Bureau *Environmental Guidelines*, Part III. Both can be found at <http://www.encapafrika.org/Resources.htm>.

All Category 3 Environmental Reviews must be approved by the BEO. Any activities that fall within Category 4 will be immediately referred to the REO and BEO, unless the MEO rejects them and thereby denies implementation of the subject activities.

- Implementing partners' annual reports and, as appropriate, progress reports shall contain a brief update on mitigation and monitoring measures being implemented, results of environmental monitoring, and any other major modifications/revisions in the development activities, and mitigation and monitoring procedures.
- USAID/RCSA will report to the REO and the BEO on an annual basis on the status of environmental screening and review and the implementation of mitigation and monitoring requirements. This report should draw upon implementing partners' progress and annual reports, as well as on periodic site visits by the MEO and REO.
- USAID/RCSA will incorporate into Mission field visits and consultations with implementing partners, the periodic examination of the environmental impacts of on-going activities and associated mitigation and monitoring.
- USAID/RCSA is responsible for monitoring and evaluation of activities after implementation with respect to environmental effects, a process that should be integrated into the SO's pertinent Performance Monitoring and Evaluation Plan, and through periodic field visits.
- USAID/RCSA is responsible for assuring that implementing partners have the human capacity necessary to incorporate environmental considerations into program planning and implementation and to take on their role in the Environmental Screening Process. Implementing partners should seek training as needed, such as through participation in the Africa Bureau's regional ENCAP training courses.

## ANNEX 1

### INSTRUCTIONS FOR AFRICA BUREAU ENVIRONMENTAL REVIEW AND REPORT (ERR) FORM

**Note to individuals adapting this form for use on a particular program/activity:**

- These instructions accompany the generic “Environmental Review & Report Form.”
- The Environmental Review Form and these instructions are for use in the review and approval of subproject proposals that are (1) carried out under an “umbrella” project AND (2) defined and reviewed *after* approval of the overall or “umbrella project.” Typical subprojects include microfinance activities or subgrants for small-scale development.
- For primarily NRM-oriented programs, consider and use the Supplemental Environmental Review Form for NRM sector activities, especially those considering NRM-based enterprises, CBNRM, ecotourism, etc..
- Underlined & blue-highlighted text MUST be modified to reflect project and mission name.
- Yellow highlighted text is only put emphasis on the points highlighted, and can also be dropped
- Both the form AND instructions should be reviewed and modified in general to reflect the needs of the specific umbrella project.
- Both form and instructions must be appended to the Initial Environmental Examination for the overall project.

**DELETE THIS PAGE BEFORE MODIFYING/DISTRIBUTING THIS FORM**

# INSTRUCTIONS FOR AFRICA BUREAU ENVIRONMENTAL REVIEW AND REPORT (ERR) FORM<sup>2</sup>



USAID/**mission or bureau name**

Instructions for environmental review of activities under the **XXX project**

**Note:** These instructions accompany the “Environmental Review & Report Form for **XXX Project** Activities.” Follow, but DO NOT SUBMIT, these instructions.

## **Who must submit the Environmental Review Form?**

All organizations applying to implement activities on the **XXX Project** must complete the “Environmental Review Form” form UNLESS the project or activity is carried out to address an emergency (e.g., international disaster assistance). *Emergencies are determined by the US Ambassador or USAID, not by the applicant.*<sup>3</sup>

## **Importance**

The proposed activity cannot be approved and no “irreversible commitment of resources” can be made until the environmental documentation, including any mitigation measures, is approved by the Mission Environmental Officer (MEO). Approval by other authorities in USAID may also be required.

NOTE: USAID may request modifications, or reject the documentation.

If the activities are found to have significant adverse impacts, a full Environmental Assessment must be conducted.

## **Step 1. Provide requested “Applicant information” (Section A of the form)**

## **Step 2. List all proposed activities**

In Section B of the form, list all proposed activities. Include all phases: *planning, design, construction, operation & maintenance*. Include ancillary activities. (These are activities that are required to build or operate the primary activity. Examples include building or improving a road so that heavy vehicles can reach the project site, excavation of fill material or gravel for construction, provision of electricity, water, or sewage facilities, disposal of solid waste, etc.)

## **Step 3a. Screening: Identify low-risk and high-risk activities**

For *each* activity you have listed in Section B of the form, refer to the list below to determine whether it is a listed low-risk or high-risk activity.

If an activity is specifically identified as “very low risk” or “high risk” in the list below, indicate this in the “screening result” column in Section B of the form.

| <b>Very low-risk activities</b><br>(Activities with low potential for adverse biophysical or health impacts; including §216.2(c)(2))  | <b>High-risk activities</b><br>(Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))   |
|---|---|
| Provision of education, technical assistance, or training. (Note that activities directly affecting the environment. do not qualify.)<br>Community awareness initiatives.<br>Controlled agricultural experimentation exclusively for the purpose of research and field evaluation confined to small areas (normally under 4 ha./10 acres). This must be carefully | River basin or new lands development<br>Planned resettlement of human populations<br>Penetration road building, or rehabilitation of roads (primary, secondary, some tertiary) over 10 km length, and any roads which may pass through or near relatively undegraded forest lands or other sensitive ecological areas |

<sup>2</sup> See separate ERR Approval Form (2 p.) for submission. Also consider if the Supplemental NRM Screening Form applies.

<sup>3</sup> See 22 CFR §216.2(b)(1). Most activities carried out under emergency circumstances are considered EXEMPT from USAID environmental procedures, except for the procurement or use of pesticides

| <b>Very low-risk activities</b><br>(Activities with low potential for adverse biophysical or health impacts; including §216.2(c)(2))   | <b>High-risk activities</b><br>(Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))  |
|--|--|
| <p>monitored and no protected or other sensitive environmental areas may be affected).</p> <p>Technical studies and analyses and other information generation activities not involving intrusive sampling of endangered species or critical habitats.</p> <p>Document or information transfers.</p> <p>Nutrition, health care or family planning, EXCEPT when (a) some included activities could directly affect the environment (construction, water supply systems, etc.) or (b) biohazardous (esp. HIV/AIDS) waste is handled or blood is tested.</p> <p>Rehabilitation of water points for domestic household use, shallow, hand-dug wells or small water storage devices. Water points must be located where no protected or other sensitive environmental areas could be affected.</p> <p><b>NOTE:</b> USAID guidance on potable water requires water quality testing for arsenic, coliform, nitrates and nitrites.</p> <p>Construction or repair of facilities if total surface area to be disturbed is under 10,000 sq. ft. (approx. 1,000 sq. m.) (and when no protected or other sensitive environmental areas could be affected).</p> <p>Support for intermediate credit arrangements (when no significant biophysical environmental impact can reasonably be expected).</p> <p>Programs of maternal and child feeding conducted under Title II of Public Law 480.</p> <p>Food for development programs under Title III of P.L. 480, when no on-the-ground biophysical interventions are likely.</p> <p>Studies or programs intended to develop the capability of recipients to engage in development planning. (Does NOT include activities directly affecting the environment)</p> <p>Small-scale Natural Resource Management activities for which the answer to ALL SUPPLEMENTAL SCREENING QUESTIONS (attached) is "NO."</p> | <p>Substantial piped water supply and sewerage construction</p> <p>Major bore hole or water point construction</p> <p>Large-scale irrigation</p> <p>Water management structures such as dams and impoundments</p> <p>Drainage of wetlands or other permanently flooded areas</p> <p>Large-scale agricultural mechanization</p> <p>Agricultural land leveling</p> <p>Procurement or use of <u>restricted use</u> pesticides, or wide-area application in non-emergency conditions under non-supervised conditions. (Consult MEO.)</p> <p>Light industrial plant production or processing (e.g. sawmill operation, agro-industrial processing of forestry products, tanneries, cloth-dyeing operations).</p> <p><b>High-risk and typically not funded by USAID:</b></p> <p>Actions determined likely to significantly degrade protected areas, such as introduction of exotic plants or animals</p> <p>Actions determined likely to jeopardize threatened &amp; endangered species or adversely modify their habitat (esp. wetlands, tropical forests)</p> <p>Conversion of forest lands to rearing of livestock</p> <p>Planned colonization of forest lands</p> <p>Procurement or use of timber harvesting equipment</p> <p>Commercial extraction of timber</p> <p>Construction of dams or other water control structures that flood relatively undegraded forest lands</p> <p>Construction, upgrading or maintenance of roads that pass through relatively undegraded forest lands. (Includes temporary haul roads for logging or other extractive industries)</p> |

(This list of activities is taken from the text of Regulation 216 and other applicable laws, regulations and directives)

**Step 3b: Identifying activities of unknown or moderate risk.**

All activities NOT identified as "very low risk" or "very high risk" are considered to be of "unknown or moderate risk." Common examples of moderate-risk activities are given in the table below. Check "moderate or unknown risk" under screening results in Section B of the form for ALL such activities.

| Common examples of moderate-risk activities  |  |
|--|--|
| <b>CAUTION: If ANY of the activities listed in this table may adversely impact (1) protected areas, (2) other sensitive environmental areas, or (3) threatened and endangered species and their habitat, THEY ARE NOT MODERATE RISK. All such activities are HIGH RISK ACTIVITIES.</b>   |  |
| <p>Small-scale agriculture, NRM, sanitation, etc. <b>[define what is meant by “small-scale” for each project].</b></p> <p>Controlled and carefully monitored agricultural experimentation exclusively for the purpose of research and field evaluation of MORE than 4 ha.</p> <p><b>NOTE: No biotechnology testing or release of any kind are to take place within an assisted country until the host countries involved have drafted and approved a regulatory framework governing biotechnology and biosafety.</b></p> <p>All USAID-funded interventions which involve biotechnologies are to be informed by the ADS 211 series governing "Biosafety Procedures for Genetic Engineering Research". In particular this guidance details the required written approval procedures needed before transferring or releasing GE products to the field.</p> <p>Moderate scale construction or rehabilitation of facilities or structures <b>(surface area to be disturbed exceeds 10,000 sq. ft (1000 sq meters) but funding level is \$200,000 or less).</b></p> <p>Construction or rehabilitation of rural roads meeting the following criteria:</p> <ul style="list-style-type: none"> <li>▪ Length of road work is less than ~10 km</li> <li>▪ No change in alignment or right of way</li> <li>▪ Ecologically sensitive areas are at least 100 m away from the road and not affected by construction or changes in drainage.</li> <li>▪ No protected areas or relatively undegraded forest are within 5 km of the road.</li> </ul> <p>Food for Development programs under Title II or III, involving small-scale infrastructure with the known potential to cause environmental harm (e.g., roads, bore holes).</p> <p>Quantity imports of commodities such as fertilizers.</p> <p>Technical studies and analyses or similar activities that could involve intrusive sampling, of endangered species or critical habitats. (Includes aerial sampling.)</p> | <p>Construction or rehabilitation of small-scale water points or water storage devices for domestic or non-domestic use. (Covers activities NOT included under “Very low risk activities” above.)</p> <p><b>NOTE:</b> USAID guidance on water quality requires testing for arsenic, nitrates, nitrites and coliform bacteria.</p> <p>Support for intermediate credit institutions when indirect environmental harm conceivably could result.</p> <p>Institutional support grants to NGOs/PVOs when the activities of the organizations are known and may reasonably have adverse environmental impact.</p> <p>Small-scale use of USEPA-registered, least-toxic general-use pesticides. Use must be limited to NGO-supervised use by farmers, demonstration, training and education, or emergency assistance.</p> <p><b>NOTE:</b> Environmental review (see step 5) must be carried out consistent with USAID Pesticide Procedures as required in Reg. 16 [22 CFR 216.3(b)(1)].</p> <p>Nutrition, health care or family planning, if (a) some included activities could directly affect the environment (e.g., construction, supply systems, etc.) or (b) biohazardous healthcare waste (esp. HIV/AIDS) is produced, syringes are used, or blood is tested.</p> |

#### **Step 4. Determine if you must write an Environmental Review Report**

Examine the “screening results” as they are entered in Table 1 of the form.

- If ALL the activities are “very low risk,” then no further review is necessary. In Section C of the form, check the box labeled “very low risk activities.” Skip to Step 8 of these instructions.
- If ANY activities are “unknown or moderate risk,” you MUST complete an ENVIRONMENTAL REVIEW REPORT addressing these activities. Proceed to Step 5.
- If ANY activities are “high risk,” note that USAID’s regulations usually require a full environmental assessment study (EA). Because these activities are assumed to have a high probability of causing significant, adverse environmental impacts, they are closely scrutinized. Any proposed high-risk activity should be discussed in advance with USAID.

In some cases, it is possible that effective mitigation and monitoring can reduce or eliminate likely impacts so that a full EA will not be required. If the applicant believes this to be the case, the Environmental Review Report must argue this case clearly and thoroughly. Proceed to Step 5.

#### **Step 5. Write the Environmental Review Report, if required**

The Environmental Review Report presents the environmental issues associated with the proposed activities. It also documents mitigation and monitoring commitments. Its purpose is to allow the applicant and USAID to evaluate the likely environmental impacts of the project. For moderate risk activities, the Environmental Review Report is typically a SHORT 2–3 page document. The Report will typically be longer when (1) activities are of higher or unknown risk, and (2) when a number of impacts and mitigation measures are being identified and discussed.

The Environmental Review Report follows the outline below:

- A. **Summary of Proposal.** Summarize background, rationale and outputs/results expected. (reference to proposal, if appropriate).
- B. **Description of activities.** For all moderate and high-risk activities listed in Table 1 of the form, succinctly describe location, siting, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during all project phases and who will undertake them. (All of this information can be provided in a table). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these.
- C. **Environmental Situation & Host Country environmental requirements.** Describe the environmental characteristics of the site(s) where the proposed activities will take place. Focus on site characteristics of concern—e.g., water supplies, animal habitat, steep slopes, etc. With regard to these critical characteristics, is the environmental situation at the site degrading, improving, or stable? In this section, also describe applicable host country environmental regulations, policies and practices.
- D. **Evaluation of Activities and Issues with Respect to Environmental Impact Potential.** Include impacts that could occur before construction starts, during construction and during operation, as well as any problems that might arise with abandoning, restoring or reusing the site at the end of the anticipated life of the facility or activity.

Explain direct, indirect, induced and cumulative effects on various components of the environment (e.g., air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archaeological or other cultural resources, people and their communities, land use, traffic, waste disposal, water supply, energy, etc.)

- E. **Environmental Mitigation Actions (including monitoring).** Provide a workplan and schedule identifying the following:

**Mitigation measures.** Identify the means taken to avoid, reduce or compensate for impacts. (For example, restoration of borrow or quarry areas, replanting of vegetation, compensation for any relocation of homes and residents.) If standard mitigation or best practice guidance exists and is being followed, cite this guidance.



**Monitoring** Indicate how mitigation measures will be monitored to ensure that they accomplish their intended result. If some impacts are uncertain, describe the monitoring which will be conducted to identify and respond to these potential impacts.

**Responsible parties.** Identify *who* will undertake mitigation and who will conduct the monitoring, and at what frequency.

- F. **Other Information.** Where possible and as appropriate, include photos of the site and surroundings; maps; and list the names of any reference materials or individuals consulted. (Pictures and maps of the site can substantially reduce the written description required in parts B & C)

**Step 6. Based on the environmental review, reach a recommended determination for each high-risk or unknown/moderate-risk activity**

For each high-risk or unknown/moderate-risk activity, the environmental review will help you decide between one of three recommended determinations:

- **no significant adverse impacts.** The activity in question will not result in significant, adverse environmental impacts. Special mitigation or monitoring is not required. Typically, this conclusion is not appropriate for high-risk activities.
- **no significant adverse impacts given specified mitigation and monitoring** With mitigation and monitoring as specified in the Environmental Review Report, the activities in question will not result in significant adverse environmental impacts.
- **significant adverse impacts.** The activities in question is likely to cause significant adverse environmental impacts and cannot be mitigated with best practices or other measures. A full environmental assessment will be required.

For each high-risk or unknown/moderate-risk activity, indicate your “recommended determination” in Section B of the form.)

**Step 7: Summarize recommended determinations**

In section C of the form, summarize your recommended determinations by checking ALL categories indicated in Table 1.

**Step 8. Sign certifications** (Section D of form)

**Step 9. Submit form to USAID project officer.** Attach Environmental Review Report, if any.

## **Supplemental Environmental Review Form for Natural Resources Programs**

### **Note to individuals adapting this form for use on a particular program/activity:**

- This supplement is oriented around major resource/issue clusters and asks “leading questions” about the actual potential for unintended harmful impacts, especially of CBNRM/ ecotourism activities.
- Underlined & blue highlighted text MUST be modified to reflect project and mission name
- Questions should be modified to respond to the needs of individual projects. This is intended to be a “living” document subject to adaptation.

**DELETE THIS PAGE BEFORE MODIFYING/DISTRIBUTING THIS FORM**

## Supplemental Environmental Review Form for Natural Resources Programs

USAID/mission or bureau name



Supplemental screening questions for natural resources activities under the XXX project (or program)

### Purpose

This is a supplement to the "Instructions for Environmental Review under the XXX project." It is to be used for natural resources-based activities, including:

- Community-Based Natural Resource Management (CBNRM)
- Ecotourism
- Natural resources-based enterprise development with micro- and small enterprises

This supplement provides additional questions to ascertain whether these proposed activities should be categorized as "very low risk."

- If the answers to ALL the questions that follow are "NO," then the proposed CBNRM or Ecotourism activity is considered "very low risk."
- If the answer to ANY question is "YES," the activity CANNOT be considered "very low risk."

### Screening

questions

| Will the activities...  | YES | NO |
|---|-----|----|
| <b>Natural Resources</b>  |     |    |
| Accelerate erosion by water or wind?  |     |    |
| Reduce soil fertility and/or permeability?  |     |    |
| Alter existing stream flow, reduce seasonal availability of water resources?  |     |    |
| Potentially contaminate surface water and groundwater supplies?   |     |    |
| Involve the extraction of renewable natural resources?  |     |    |
| Lead to unsustainable use of renewable natural resources such as forest products?   |     |    |
| Involve the extraction of non-renewable natural resources?  |     |    |
| Restrict customary access to natural resources?   |     |    |
| Reduce local air quality through generating dust, burning of wastes or using fossil fuels and other materials in improperly ventilated areas? |     |    |
| Affect dry-season grazing areas and/or lead to restricted access to a common resource?  |     |    |
| Lead to unsustainable or unnecessarily high water extraction and/or wasteful use?   |     |    |
|   |     |    |
| <b>Ecosystems and Biodiversity</b>  |     |    |
| Drain wetlands, or be sited on floodplains?   |     |    |
| Harvest wetland plant materials or utilize sediments of bodies of water?  |     |    |
| Lead to the clearing of forestlands for agriculture, the over-harvesting of valuable forest species?  |     |    |
| Promote in-forest bee keeping?  |     |    |
| Lead to increased hunting, or the collection of animals or plant materials?   |     |    |
| Increase the risks to endangered or threatened species?   |     |    |

| <b>Will the activities...</b>  | <b>YES</b> | <b>NO</b> |
|--|------------|-----------|
| Introduce new exotic species of plants or animals to the area?   |            |           |
| Lead to road construction or rehabilitation, or otherwise facilitate access to fragile areas (natural woodlands, wetlands, erosion-prone areas)? |            |           |
| Cause disruption of wildlife migratory routes?   |            |           |
|  |            |           |
| <b>Agricultural and Forestry Production</b>  |            |           |
| Have an impact on existing or traditional agricultural production systems by reducing seed availability or reallocating land for other purposes? |            |           |
| Lead to forest plantation harvesting without replanting, the burning of pastureland, or a reduction in fallow periods?                           |            |           |
| Affect existing food storage capacities by reducing food inventories or encouraging the incidence of pests?                                      |            |           |
| Affect domestic livestock by reducing grazing areas, or creating conditions where livestock disease problems could be exacerbated?               |            |           |
| Involve the use of insecticides, herbicides and/or other pesticides?   |            |           |
|  |            |           |
| <b>Community and Social Issues</b>   |            |           |
| Have a negative impact on potable water supplies?  |            |           |
| Encourage domestic animal migration through natural areas?   |            |           |
| Change the existing land tenure system?  |            |           |
| Have a negative impact on culturally important sites in the community?   |            |           |
| Increase in-migration to the area?   |            |           |
| Create conditions that lead to a reduction in community health standards?  |            |           |
| Lead to the generation of non-biodegradable waste?   |            |           |
| Involve the relocation of the local community?   |            |           |
| Potentially cause or aggravate land-use conflicts?   |            |           |



USAID/**mission or bureau name:**

Environmental Review & Report Approval Form for **xxx** Program/Activities

**Note: Follow, but do not submit, the above instructions.**

**A. Applicant information**

|                                       |   |
|---------------------------------------|---|
| Organization                          | Parent grant or project                 |
| Individual contact and title          | Address, phone & email (if available)   |
| Proposed activity (brief description) | Amount of funding requested             |
| Location of proposed activity         | Start and end date of proposed activity |

**B. Activities, screening results, and recommended determination**

| Proposed activities<br>(continue on additional page if necessary) | Screening result<br>(Step 3 of instructions) |            |                           | Recommended Determinations<br>(Step 6 of instructions. Complete for all moderate/unknown and high-risk activities) |   |                            |
|---|--|------------|---------------------------|--|---|----------------------------|
|   | Very Low Risk                                | High-Risk* | Moderate risk or unknown* | No significant adverse impact  | mitigation, no significant adverse impact | Significant Adverse impact |
| 1.  |  |            |                           |  |   |                            |
| 2.  |  |            |                           |  |   |                            |
| 3.  |  |            |                           |  |   |                            |
| 4.  |  |            |                           |  |   |                            |
| 5.  |  |            |                           |  |   |                            |
| 6.  |  |            |                           |  |   |                            |
|   |  |            |                           |  |   |                            |

\*These screening results require completion of an Environmental Review Report

**C. Summary of recommended determinations (check ALL that apply)**

|   |   |
|---|---|
| The proposal contains. . .  | (equivalent Regulation 216 terminology) |
| <input type="checkbox"/> Very low risk activities   | categorical exclusion(s)                |
| <input type="checkbox"/> After environmental review, activities determined to have <b>no significant adverse impacts*</b> | negative determination(s)*              |

|  |   |
|--|---|
| <input type="checkbox"/> After environmental review, activities determined to have <b>no significant adverse impacts, given specified mitigation and monitoring*</b> | <i>negative determination(s) with conditions*</i> |
| <input type="checkbox"/> After environmental review, activities determined to have <b>significant adverse impacts*</b>   | <i>positive determination(s)*</i>                 |

**\*for these determinations, the form is not complete unless accompanied by Environmental Review Report**

**D. Certification:**

I, the undersigned, certify that:

1. the information on this form is correct and complete;
2. the following actions have been and will be taken to assure that the activity complies with environmental requirements established for this Project:
  - Those responsible for implementing this activity have received training in environmental review AND training and/or documentation describing essential design elements and best practices for activities of this nature.
  - These design elements and best practices will be followed in implementing this activity.
  - Any specific mitigation or monitoring measures described in the Environmental Review Report will be implemented in their entirety.
  - Compliance with these conditions will be regularly confirmed and documented by on-site inspections during the activity and at its completion.

(Signature) \_\_\_\_\_

(Date) \_\_\_\_\_

(Print name) \_\_\_\_\_

**BELOW THIS LINE FOR USAID USE ONLY**

**Clearance record**

|   |              |
|---|--------------|
| USAID Project Officer (print name) _____ (signature) _____<br><input type="checkbox"/> Clearance given<br><input type="checkbox"/> Clearance denied | (date) _____ |
| USAID MEO (print name) _____ (signature) _____<br><input type="checkbox"/> Clearance given<br><input type="checkbox"/> Clearance denied             | (date) _____ |
| USAID REO* (print name) _____ (signature) _____<br><input type="checkbox"/> Clearance given<br><input type="checkbox"/> Clearance denied            | (date) _____ |
| USAID BEO* (print name) _____ (signature) _____<br><input type="checkbox"/> Clearance given<br><input type="checkbox"/> Clearance denied            | (date) _____ |

\*REO and BEO approval required for all "high risk" screening results and for determinations of "significant adverse impacts"

**Note: if clearance is denied, comments must be provided to applicant**